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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,510	07/25/2003	Jeffrey V. Lindholm	X-1390 US	3272
24309	7590	10/19/2005	EXAMINER	
XILINX, INC ATTN: LEGAL DEPARTMENT 2100 LOGIC DR SAN JOSE, CA 95124			DINH, PAUL	
			ART UNIT	PAPER NUMBER
			2825	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,510

Applicant(s)

LINDHOLM ET AL.

Examiner

Paul Dinh

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/25/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Agrawal et al (US Patent Application No. 2004/0010767)

(Claims 1, 8, 15)

A common software tile comprising a description of the common routing resources, the common software tile having first terminals for coupling an instance of the common software tile to other instances of the common software tile and further having second terminals (para 0011, 0015, 0038, 0040-0041, 0047, 0051, 0059, fig 4); and

For each hardware tile, a unique software tile comprising a description of the unique logic resources included in the hardware tile, each unique software tile comprising terminals for coupling the unique software tile to the second terminals of an instance of the common software tile (para 0011, 0015, 0038, 0040-0041, 0047, 0051, 0059, fig 4)

(Claims 2, 9, 16) wherein each hardware tile further includes unique routing resources unique to each hardware tile (abstract, para 0011, 0015, 0038, 0040-0041, 0047, 0051, 0059, fig 2-4); and the unique software tile for each hardware tile further comprises a unique description of the unique routing resources included in the hardware tile (abstract, para 0011, 0015, 0038, 0040-0041, 0047, 0051, 0059, fig 2-4)

(Claims 3, 10, 17) wherein the PLD is a FPGA (abstract, summary, fig 1-4)

(Claims 4, 11, 18) wherein the plurality of programmable hardware tiles comprises at least one of the following types of logic blocks: configurable logic blocks (CLBs), Random Access Memory (RAM) blocks, multiplier blocks, and processor blocks (fig 1-4).

(Claims 5, 12, 19) wherein the plurality of programmable hardware tiles further comprises I/O blocks (para 0010, 0019, 0034, 0074, 0086, 0097, fig 1-4)

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(Claims 6, 13, 20) further comprising a PLD device model representing a placement of the plurality of programmable hardware tiles in the PLD and comprising instances of the common software tile and the unique software tiles (para 0010, 0013, 0019, 0033, 0038, 0059-0061, 0090, 0099, fig 2-4), the PLD device model utilizing a uniform numbering scheme based on numbered instances of the common software tile (para 0010, 0013, 0019, 0033, 0038, 0059-0061, 0090, 0099, fig 2-4)

(Claims 7, 14, 21) wherein the plurality of programmable hardware tiles comprises an entirety of the programmable hardware tiles in the PLD (para 0010, 0013, 0019, 0033, 0038, 0059-0061, 0090, 0099, fig 2-4).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Dinh whose telephone number is 571-272-1890. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Dinh
Patent Examiner

A handwritten signature in black ink that reads "Paul Dinh". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.